AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1 - 32. (Canceled)

33. (Currently Amended) A decoupler assembly for transferring torque between a shaft and an endless power transmitting element, said decoupler assembly comprising:

a hub that is adapted to be coupled to the shaft such that the shaft co-rotates with the hub about a rotational axis;

a carrier that is rotatable relative to the hub;

a torsion spring concentric with the rotational axis ~~of the decoupler assembly~~ and extending between a hub end and a carrier end for transferring rotary power between the hub and carrier;

a pulley rotatably coupled to the hub, the pulley having an outer periphery that is adapted to engage the endless power transmitting element, the pulley having an inner surface formed therein;

a clutch spring formed only of wire, the clutch spring having a first end that is fixedly coupled to the carrier, a second end opposite the first end and a plurality of coils between the first and second ends, the clutch spring exiting the carrier and extending toward the inner surface of the pulley such that at least one of the plurality of coils is engaged against the inner surface of the pulley when rotary power is transmitted from

the pulley to the hub, the plurality of coils contracting to at least reduce gripping engagement between the plurality of coils and the inner surface of the pulley in response to deceleration of the pulley relative to the carrier beyond a predetermined extent to permit the hub to rotate at a speed in excess of the pulley; and

a lubricant disposed on coils of the clutch spring;

wherein the pulley and the hub cooperate to define an annular cavity in which the torsion spring and the clutch spring are disposed and wherein the torsion spring and the clutch spring are disposed ~~in the annular cavity~~ axially between the carrier and the hub.

34. (Previously Presented) The decoupler assembly of Claim 33, wherein the clutch spring exits the carrier in a radially outward direction.

35. (Previously Presented) The decoupler assembly of Claim 33, wherein the torsion spring and the clutch spring are coiled in opposite directions.

36. (Previously Presented) The decoupler assembly of Claim 33, wherein the torsion spring uncoils as a magnitude of the rotary power transmitted between the carrier and the hub increases.

37. (Previously Presented) The decoupler assembly of Claim 36, wherein at least one of the carrier and the hub includes a tapered ramp and an abutting wall that is perpendicular to the tapered ramp and wherein the torsion spring abuts each of the abutting walls.

38. (Previously Presented) The decoupler assembly of Claim 33, wherein the carrier is mounted on the hub.

39. (Previously Presented) The decoupler assembly of Claim 33, wherein the wire has a cross-sectional shape with an outer side that abuts the inner surface of the pulley, the outer side having a contour that is configured to distribute load transmitted from the clutch spring to the pulley over multiple points of contact spaced along the outer side.

40. (Previously Presented) The decoupler assembly of Claim 39, wherein the outer side has a flat contour.

41. (Previously Presented) The decoupler assembly of Claim 40, wherein the wire has a square cross-sectional shape or a rectangular cross-sectional shape.

42. (Previously Presented) The decoupler assembly of Claim 33, wherein the wire has a cross-sectional shape with an outer side, which abuts the inner surface of the pulley, and lateral sides that are coupled to the opposite lateral sides of the outer side, the lateral sides having a flat contour.

43. (Previously Presented) The decoupler assembly of Claim 42, wherein the wire has a square cross-sectional shape or a rectangular cross-sectional shape.

44. (Previously Presented) The decoupler assembly of Claim 33, wherein the torsion spring is axially compressed between the carrier and the hub.

45. (Previously Presented) The decoupler assembly of Claim 33, further comprising a bearing disposed between the hub and the pulley.

46. (Previously Presented) The decoupler assembly of Claim 33, wherein the plurality of coils are abutted against one another.

47. (Previously Presented) The decoupler assembly of Claim 33, wherein the first end of the clutch spring is received into a helical groove that is formed on the carrier.

48. (Previously Presented) The decoupler assembly of Claim 47, wherein the helical groove is formed on an axial end face of the carrier.

49. (Previously Presented) The decoupler assembly of Claim 33, wherein the lubricant is a grease.

50. (Previously Presented) The decoupler assembly of Claim 49, wherein the clutch spring exits the carrier in a radially outward direction.

51. (Previously Presented) The decoupler assembly of Claim 49, wherein the torsion spring and the clutch spring are coiled in opposite directions.

52. (Previously Presented) The decoupler assembly of Claim 49, wherein the torsion spring uncoils as a magnitude of the rotary power transmitted between the carrier and the hub increases.

53. (Previously Presented) The decoupler assembly of Claim 52, wherein at least one of the carrier and the hub includes a tapered ramp and an abutting wall that is perpendicular to the tapered ramp and wherein the torsion spring abuts each of the abutting walls.

54. (Previously Presented) The decoupler assembly of Claim 49, wherein the carrier is mounted on the hub.

55. (Previously Presented) The decoupler assembly of Claim 49, wherein the wire has a cross-sectional shape with an outer side that abuts the inner surface of the pulley, the outer side having a contour that is configured to distribute load transmitted from the clutch spring to the pulley over multiple points of contact spaced along the outer side.

56. (Previously Presented) The decoupler assembly of Claim 55, wherein the outer side has a flat contour.

57. (Previously Presented) The decoupler assembly of Claim 56, wherein the wire has a square cross-sectional shape or a rectangular cross-sectional shape.

58. (Previously Presented) The decoupler assembly of Claim 49, wherein the wire has a cross-sectional shape with an outer side, which abuts the inner surface of the pulley, and lateral sides that are coupled to the opposite lateral sides of the outer side, the lateral sides having a flat contour.

59. (Previously Presented) The decoupler assembly of Claim 58, wherein the wire has a square cross-sectional shape or a rectangular cross-sectional shape.

60. (Previously Presented) The decoupler assembly of Claim 49, wherein the torsion spring is axially compressed between the carrier and the hub.

61. (Previously Presented) The decoupler assembly of Claim 49, further comprising a bearing disposed between the hub and the pulley.

62. (Previously Presented) The decoupler assembly of Claim 49, wherein the plurality of coils are abutted against one another.

63. (Previously Presented) The decoupler assembly of Claim 49, wherein the first end of the clutch spring is received into a helical groove that is formed on the carrier.

64. (Previously Presented) The decoupler assembly of Claim 63, wherein the helical groove is formed on an axial end face of the carrier.

65. (Currently Amended) A decoupler assembly for transferring torque between a shaft and an endless power transmitting element, said decoupler assembly comprising:

a hub that is adapted to be coupled to the shaft such that the shaft co-rotates with the hub about a rotational axis;

a carrier that is rotatably mounted on the hub;

a torsion spring concentric with the rotational axis of the ~~decoupler assembly~~ hub and extending between a hub end and a carrier end for transferring rotary power between the hub and carrier, the torsion spring being axially compressed between the carrier and the hub and uncoiling as a magnitude of the rotary power transmitted between the carrier and the hub increases;

a pulley rotatably coupled to the hub, the pulley having an outer periphery that is adapted to engage the endless power transmitting element, the pulley having an inner surface formed therein;

a clutch spring formed only of wire with a square or rectangular cross-sectional shape, the clutch spring having a first end that is fixedly coupled to the carrier, a second

end opposite the first end and a plurality of coils between the first and second ends, the clutch spring exiting the carrier in a radially outward direction and extending toward the inner surface of the pulley such that at least one of the plurality of coils is engaged against the inner surface of the pulley when rotary power is transmitted from the pulley to the hub, the plurality of coils contracting to at least reduce gripping engagement between the plurality of coils and the inner surface of the pulley in response to deceleration of the pulley relative to the carrier beyond a predetermined extent to permit the hub to rotate at a speed in excess of the pulley;

a bearing disposed between the hub and the pulley; and

a lubricant disposed on coils of the clutch spring;

wherein the torsion spring and the clutch spring are coiled in opposite directions;

wherein the pulley and the hub cooperate to define an annular cavity in which the torsion spring and the clutch spring are disposed and wherein the torsion spring and the clutch spring are disposed ~~in the annular cavity~~ axially between the carrier and the hub; and

wherein at least one of the carrier and the hub includes a tapered ramp and an abutting wall that is perpendicular to the tapered ramp and wherein the torsion spring abuts each of the abutting walls.

66. (Previously Presented) The decoupler assembly of Claim 65, wherein the lubricant is a grease.